

REMARKS

Applicant is in receipt of the Office Action mailed January 25, 2006. No claims have been amended. Therefore, claims 1-22, 24-44, 46-53, and 55-85 remain pending in this case. Reconsideration of the present case is earnestly requested in light of the following remarks.

Claim 103 Rejections

Claims 1, 2, 6-9, 11-14, 21, 22, 26, 28, 47, 48, 52, 53, 57-59, 60, 66-68, 71, 72, 74, 77, 78, 80, 83, and 84 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard (US 6,460,143, "Howard") in view of Shih (6,405,362, "Shih").

Claims 3, 16, and 49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard in view of Shih in further view of Chang (US 2004/0027879, "Chang").

Claims 4, 5, 19, 20, 24, 50, 51, 55, 69, 70, 75, 76, 81, and 82 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard in view of Shih in further view of Knight (US 2003/0167345, "Knight").

Claims 29, 31, and 33-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard in view of Chang in further view Shih.

Claim 39 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard in view of Chang, Shih, and Knight.

Claims 40-44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard in view of Chang.

Claim 46 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Howard in view of Chang, Shih, and Knight.

Regarding claim 1, Applicant respectfully submits that Howard in view of Shih fails to teach or suggest **wherein the device is electrically disconnected from the host controller if the device is not in an active state**. With regard to this element of claim 1, the Examiner cites claims 1 and 4, and column 4, line 60 – column 7, line 35 of Howard. Applicant reminds the Examiner that Howard "relates to apparatus and

techniques for awakening bus circuitry from an inactive state as needed” (column 4, lines 60-61). More specifically, Applicant notes that various elements, e.g., the microprocessor, the USB bus, and/or the PCI bus, of the portable computer disclosed in Howard may be placed in “inactive” or “shutdown” states to save power for the computer (Abstract); however, Howard fails to disclose electrical disconnection of the peripheral devices, much less doing so if the device is not in an active state. For example, since Howard is silent regarding electrical disconnection of the device, there is no reason to presume that in low power states the peripheral device(s) are electrically disconnected. Said another way, if the device is electrically connected before the inactive state is invoked, the device stays electrically connected during that state. Moreover, nowhere does Howard teach or suggest detecting whether a device is in an active state, and *electrically disconnecting* the device from the host controller *if the device is not in an active state*. Additionally, Applicant submits that Shih also fails to disclose this feature of claim 1. Thus, for at least the reasons provided above, Howard in view of Shih, taken singly, or in combination fails to teach or suggest this feature of claim 1.

With further regard to claim 1, Applicant respectfully submits that Howard in view of Shih fails to teach or suggest **wherein the device being electrically disconnected from the host controller causes an appearance to the host controller that the device is not coupled to the host controller**. As indicated above, the Examiner admits that Howard fails to teach or suggest this limitation, and relies on Shih to teach this feature. However, Shih teaches a method for “automatically installing a software application and automatically removing and releasing resources used by the application is disclosed” (Abstract). More specifically, Shih discloses (Abstract):

In one embodiment of the invention, the computerized system includes an operating system for controlling and maintaining resources on a computer; and an event monitor. The event monitor invokes an autorun program in response to a signal from the operating system that a computer-readable medium has been inserted into the computer. The event monitor also invokes the autorun program upon receipt of a signal that the computer readable medium has been removed from the computer. The autorun program installs an application from the computer readable medium when the medium is inserted and releases resources acquired by the application when the medium is removed.

With regard to this feature, the Examiner cites column 8, line 36 – column 9, line 52. The pertinent paragraph from this section recites:

If the event type determined at 310 was the removal of a Compact Flash memory card, the method then proceeds to 325. Here, the autorun program that was invoked at 315 is invoked again, this time with a parameter indicating that a cleanup, or uninstall, is to be performed. The method terminates any applications installed and started at 320. In addition, the method releases resources acquired during the installation and running of the application, such as registry entries, display icons, and configuration files. Removing these items eliminates potential references to the Compact Flash memory, thereby reducing the potential for inadvertent system crashes caused by attempting to read memory that is no longer present. In addition, releasing the resources acquired during the installation and running of the application allows other programs and applications to use the resources, thereby conserving resources in a resource limited environment. After releasing the resources, the method proceeds to 305 to wait for the next event.

Thus, in Shih, detection of insertion or removal of a memory card may be detected. Upon detection of *physical* removal of the memory card, resources used by an application loaded from the memory card may be freed. Applicant respectfully submits that this is not pertinent to electrical disconnection of a device from a host controller. In the instant claims, the device remains physically coupled to the host controller; in contrast, Shih specifically discloses *physical removal* of a memory card and fails to disclose the electrical disconnection of a device described in the claims. Additionally, as argued above, Howard fails to teach electrical disconnection of the device from the host controller. Thus, Applicant respectfully submits that Howard in view of Shih, taken singly, or in combination, fails to teach or suggest *wherein the device being electrically disconnected from the host controller causes an appearance to the host controller that the device is not coupled to the host controller*.

Applicant also submits that the Examiner has failed to provide a proper motivation to combine these two references. In the instant Office Action, the Examiner states:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the teachings of Shih to the system of Howard in order to prevent system crashes caused by attempting to read memory that is removed by uninstalling display icons or register entries.

Applicant respectfully submits that performing clean up operations, i.e., “uninstalling display icons or register entries”, in response to physical removal of a memory card is not relevant to the instant claims. The Examiner seems to imply that these features of Shih (which are not claimed in the instant Application) teaches *wherein the device being electrically disconnected from the host controller causes an appearance to the host controller that the device is not coupled to the host controller*. However, Applicant respectfully submits that the Examiner has instead provided motivation to combine the references to teach a new reference, i.e., one that is limited to memory cards and that uninstalls display icons or register entries when the memory card is *physically removed*. Applicant respectfully submits that this is not pertinent to the claims of the instant Application.

Additionally, Applicant reminds the Examiner that if a proposed modification would render the prior art feature unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900 (Fed. Cir. 1984). As disclosed in Howard, the USB host controller may enter a low power or shutdown state to conserve power. While in this state, wakeup circuitry may monitor and detect resume signals, e.g., when the peripheral is used, or when it resumes activity. Applicant respectfully submits that adding the proposed features of Shih, i.e., clean up and removal of resources of a program that is stored on the memory card (which is not the peripherals described in Howard), would render Howard’s invention unsatisfactory for its intended purpose. Moreover, were the resources and icons associated with Howard’s peripherals removed every time the USB host controller went to sleep, which is not specifically taught in either or both of Howard and Shih, when awoken, the USB host controller would be unable to resume activity with the peripheral because all the required resources would be removed or “cleaned up”.

Furthermore, Applicant also reminds the Examiner that to establish a prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974), MPEP 2143.03. Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion or incentive to do so. In re Bond, 910 F. 2d 81, 834, 15 USPQ2d 1566, 1568 (Fed. Cir.

1990). Applicant respectfully submits that neither Howard nor Smith, taken singly or in combination teach or suggest some incentive to combine. As argued above, the proposed combination would render Howard's invention unsatisfactory, and so may not be used to make a *prima facie* case of obviousness.

With further regard to the combination of Howard and Shih, Applicant submits that the Examiner's provided motivation to combine simply states one of the features of Shih, and nowhere indicates why a combination with Howard is required. For example, Shih specifically states:

If the event type determined at 310 was the removal of a Compact Flash memory card, the method then proceeds to 325. Here, the autorun program that was invoked at 315 is invoked again, this time with a parameter indicating that a cleanup, or uninstall, is to be performed. The method terminates any applications installed and started at 320. **In addition, the method releases resources acquired during the installation and running of the application, such as registry entries, display icons, and configuration files. Removing these items eliminates potential references to the Compact Flash memory, thereby reducing the potential for inadvertent system crashes caused by attempting to read memory that is no longer present.** In addition, releasing the resources acquired during the installation and running of the application allows other programs and applications to use the resources, thereby conserving resources in a resource limited environment. After releasing the resources, the method proceeds to 305 to wait for the next event. (emphasis added)

Thus, as indicated above, Applicant respectfully submits that the provided motivation simply indicates the presumed benefits of the method provided by Shih and nowhere indicates a motivation to combine these two references.

Moreover, were these two references combinable, which Applicant argues they are not, Howard in view of Shih, taken singly, or in combination, fails to teach all of the features of claim 1. Thus, for at least the reasons provided above, Applicant submits that the cited art fails to teach all the features and limitations of claim 1, and so Applicant submits that claim 1 and those claims dependent therefrom are patentably distinct and non-obvious over the cited art, and are thus allowable.

Claims 14, 29, 40, 47, 66, 74, and 80 include similar limitations as claim 1, and so the above arguments apply with equal force to these claims. Thus, for at least the reasons provided above, Applicant submits that claims 14, 29, 40, 47, 66, 74, and 80, and those

claims respectively dependent therefrom, are patentably distinct and non-obvious, and are thus allowable.

Applicant also submits that numerous ones of the dependent claims recite further distinctions over the cited art. However, since the rejection has been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time.

Allowable Subject Matter

Applicant appreciates the allowed subject matter of claims 61-65 and dependent claims 10, 17, 18, 25, 56, 73, 79, and 85. However, in light of the remarks above, Applicant respectfully requests removal of the 103 rejections of claims 1-9, 11-16, 19-22, 24, 26-44, 46-53, 55, 57-72, 74-78, and 80-84.

CONCLUSION

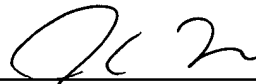
Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5707-06000/JCH.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

Respectfully submitted,



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